

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 09/524,587 | 03/13/2000 | Seiji Manabe | MAT-7927US | 6215 |
| 7590 04/20/2004 | | | EXAM | |
| Lawrence E Ashery | | | NGUYEN, CHANH DUY | |
| Ratner & Prestia One Westlakes Berwyn Ste 301 P O Box 980 Valley Forge, PA 19482-0980 | | | ART UNIT | PAPER NUMBER |
| | | | 2675 | 16 |
| | | | DATE MAILED: 04/20/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|--------------------------------|--|--|--|--|
| Office Andrew Commence | 09/524,587 | MANABE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Chanh Nguyen | 2675 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 09 February 2004. | | | | | | |
| 2a)⊠ This action is FINAL . 2b)□ This | 2a)⊠ This action is FINAL . 2b)□ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-56</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) 1-22,25,33,37-42 and 44-56 is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>23-24, 26-32, 34-36, 43</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| | | | | | | |
| Attachment(s) | A) 🔲 (manage design accord | (IDTO 442) | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date | | | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) Notice of Informal F | Patent Application (PTO-152) | | | | |
| Paper No(s)/Mail Date U.S. Patent and Trademark Office | o) | | | | | |
| | tion Summary | Part of Paper No./Mail Date 16 | | | | |



Art Unit: 2675

DETAILED ACTION

Response to Amendment

1. The amendment filed on February 09, 2004 has been entered and considered by examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 23-24, 26-27, 30-32, 34-36 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindblad (U.S. Patent No. 5,404,277).

As to claim 23, Lindblad discloses a surface lighting device comprising a light guide member (10) including a light-inlet plane (surface 16), a light reflecting plane (surface 22) above the light inlet plane (surface 16), a light guide section (section formed by two planes16, 22), a light emitting section (surface 24) and a light source (12) disposed on a corner of the light guide member (10), wherein an angle (31) formed by two planes (surfaces 22 and 28) of the light guide member (10), where the light-inlet plane (16) exists between the two planes (22 and 28), is an acute angle (see column 2, lines 66-68). It is noted that the acute angle (31) formed by two planes (22 and 16), and every line from the light inlet plane (28) is parallel to the lines of plane 16. Thus, plane (22) and plane (28) of the light-guide member (10) are also formed an acute angle as

Art Unit: 2675

the same as acute angle (31). Furthermore, the claimed "an angle formed by two planes of the light guide member, where the light-inlet plane exists between the two planes, is an acute angle" also read on the slant plane (22) and plane (20) or plane (22) and (23) formed an acute angle. It is also noted that the cross section of Figure 19 in the invention forming the planes is the same way as Figures 1-2 of Lindblad.

As to claim 32, this claim differs from claim 23 only in that the limitation "a liquid crystal display element" is additionally recited. Lindblad clearly teaches a liquid crystal display element (25).

As to claims 36 and 43, these claim differs from claim 32 in that the limitation "portable" is additionally recited in the preamble. Lindblad clearly teaches a portable terminal which is described in the reference of Blackington as cited on column 1, lines 20-25.

As to claims 24 and 26, Lindblad clearly teaches at least one of the two plane (16, 22) approaching a emitting face a greater distance from the light source (12) as broad claim.

As to claim 27, the limitation "the light-inlet includes an end face slant with respect to the light emitting section and an incident plane" broadly reads on the surface (22) of Lindblad which is slant with respect to the light emitting section (24) and an incident plane (16).

As to claim 30, Lindband clearly teaches the light source (12) being a single piece of light emitting diode.

Art Unit: 2675

As to claims 31 and 35, Lindband teaches that "one or more dies (12) can be mounted on board 11 beneath surface 16" (see column 2, lines 58-59). This read on claimed a plurality of light emitting diodes.

As to claim 34, the claimed "two sides adjacent to said light source are longer than other sides respectively" so broad that it reads sides (24 and 17-18) are longer than sides (22 and 23) as taught by Lindband.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindband in view of Koike et al (U.S. Patent No. 5,528,709).

Art Unit: 2675

As to claim 28, note the discussion of Lindband above, Lindband does not mention a curved face widening in sector shape near the light source. Koike (Figure 5B) teaches a curved face widening in sector shape near the light source (3). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used a curved face widening in sector shape near the light source (3) as taught by Koike to the light inlet of Lindblad so that it can be used when the LED is weak in directivity of radiation light (see column 8,lines 15-18 of Koike).

As to claim 29, Koike clearly teaches a light emitting diode (3) having concave face.

Response to Arguments

7. Applicant's arguments with respect to claims 23-24, 26-32, 34-36 and 43 have been considered but are most in view of the new ground(s) of rejection.

Applicant argues that Lindblad does not show "two planes forming an acute angle with a light inlet therebetween". Examiner disagrees with applicant his point of view because the limitation " two planes forming an acute angle with a light inlet plane therebetween" can be read or interpreted on the planes of Lindblad in many different ways. For example, plane (22) and plane (28) form an cute angle with a light inlet plane (16) therebetween or plane (22) and plane (20) form an cute angle with a light inlet plane (16) therebetween or plane (22) and plane (23) form an cute angle with a light inlet plane (16) therebetween. It is also noted that the cross section of Figure 19 in the invention forming the planes is the same way as Figures 1-2 of Lindblad.

Application/Control Number: 09/524,587 Page 6

Art Unit: 2675

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

Art Unit: 2675

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

C. Nguyen April 7, 2004

DEMUSEA EASUGINED